

**PLANNING COST ESTIMATE FOR A WATER MANAGEMENT PLAN
SOUHEGAN**

	Units	# of Units	Cost/ unit	TOTAL COST
1. ESTABLISH PROTECTED INSTREAM FLOWS				
A. Identify critical reaches and resources Review water quality standards, river nomination, river corridor management plan and generate a detailed list	Lump sum	1	\$5,000	\$5,000
B. River survey Survey of instream resources, including fish, macroinvertebrates, recreational use, and other things identified in A	Lump sum	1	\$30,000	\$30,000
C. Protected Instream Flow analysis Prepare a river reach-specific analysis of flow requirements to support critical resources identified in A. and B. Cost based on a MESOHABSIM model assessment.	River mile	34	\$3,000	\$102,000
<i>Sub Total</i>				<i>\$137,000</i>
2. PREPARE A WATERSHED-WIDE CONSERVATION PLAN				
A. Develop conservation measures by user class Collect information on types of water user in the watershed, and conduct a literature search of conservation measures and best management practices applicable to each type of user	Lump sum	1	\$15,000	\$15,000
B. Collect water use data and information Collect all information available at DES, then conduct site visits and interviews with each water user and write a report of their water use patterns, needs, and potential for conservation.	Registered water user: 30hours/ user @ \$50/ hr.	12	\$1,500	\$18,000
C. Estimate costs for implementation of conservation measures Estimate costs to implement conservation plan.	Registered water user: 10hours/ user @ \$50/	12	\$500	\$6,000
D. Negotiate conservation measures with users Develop a conservation implementation plan and quantitative water use reduction targets for each water user.	Registered water user: 40hours/ user @ \$50/ h	12	\$2,000	\$24,000
<i>Sub Total</i>				<i>\$63,000</i>
3. LOGISTICAL, ADMINISTRATIVE, AND TECHNICAL SUPPORT TO ADVISORY AND TECHNICAL REVIEW COMMITTEES				
A. Public meeting logistics and mailings or other public notices	Each	10	\$1,000	\$10,000
B. Technical support - presentations of concepts and plan progress	Each	5	\$2,000	\$10,000
<i>Sub Total</i>				<i>\$20,000</i>
4. WATER USE PLAN				
A. Collect water use data and information Collect all information available at DES, then conduct site visits and interviews with each water user and write a report of their water use patterns, needs, and potential for reduction/sharing in times of scarcity	Registered water user: 15hours/ user @ \$50/ hr.	12	\$750	\$9,000
B. Mediate negotiations among water users Present instream flow requirements to users, and guide negotiations. Prepare and revise draft water use plans for each user based on progress of negotiations	Registered water user: 20hours/ user @ \$50/ hr.	12	\$1,000	\$12,000
C. Estimate costs for implementation of water use plan measures Estimate costs to implement water use plan by AWUs including an implementation schedule.	Registered water user: 20hours/ user @ \$50/	12	\$1,000	\$12,000
D. Prepare comprehensive water use plan document	Lump sum	1	\$20,000	\$20,000
<i>Sub Total</i>				<i>\$53,000</i>
5. IMPOUNDMENT MANAGEMENT PLAN				
A. Collect information dam characteristics and operation Collect all information available at DES, then conduct site visits and interviews with each impoundment owner and write a report of their operation patterns, needs, and potential for water management for release in times of	Dam owner: 15hours/ owner @ \$50/ hr.	17	\$750	\$12,750
B. Mediate negotiations among dam owners and water users Present instream flow requirements to dam owners, and guide negotiations. Suggest interactive management options among dam owners and water users. Prepare and revise draft dam operation plans for each dam based on progress of negotiations	Dam owner: 40hours/ owner @ \$50/ hr.	17	\$2,000	\$34,000
C. Estimate costs for implementation of impoundment management measures Estimate costs to implement impoundment management plan including an implementation schedule.	Registered water user: 10hours/ user @ \$50/	17	\$500	\$8,500
D. Prepare comprehensive impoundment management plan document	Lump sum	1	\$20,000	\$20,000
<i>Sub Total</i>				<i>\$75,250</i>
TOTAL				\$348,250

**PLANNING COST ESTIMATE FOR A WATER MANAGEMENT PLAN
LAMPREY**

	Units	# of Units	Cost/ unit	TOTAL COST
1. ESTABLISH PROTECTED INSTREAM FLOWS				
A. Identify critical reaches and resources Review water quality standards, river nomination, river corridor management plan and generate a detailed list	Lump sum	1	\$5,000	\$5,000
B. River survey Survey of instream resources, including fish, macroinvertebrates, recreational use, and other things identified in A	Lump sum	1	\$30,000	\$30,000
C. Protected Instream Flow analysis Prepare a river reach-specific analysis of flow requirements to support critical resources identified in A. and B. Cost based on a MESOHABSIM model assessment.	River mile	12	\$3,000	\$36,000
<i>Sub Total</i>				<i>\$71,000</i>
2. PREPARE A WATERSHED-WIDE CONSERVATION PLAN				
A. Develop conservation measures by user class Collect information on types of water user in the watershed, and conduct a literature search of conservation measures and best management practices applicable to each type of user	Lump sum	1	\$15,000	\$15,000
B. Collect water use data and information Collect all information available at DES, then conduct site visits and interviews with each water user and write a report of their water use patterns, needs, and potential for conservation.	Registered water user: 30hours/ user @ \$50/ hr.	4	\$1,500	\$6,000
C. Estimate costs for implementation of conservation measures Estimate costs to implement conservation plan.	Registered water user: 10hours/ user @ \$50/	4	\$500	\$2,000
D. Negotiate conservation measures with users Develop a conservation implementation plan and quantitative water use reduction targets for each water user.	Registered water user: 40hours/ user @ \$50/ h	4	\$2,000	\$8,000
<i>Sub Total</i>				<i>\$31,000</i>
3. LOGISTICAL, ADMINISTRATIVE, AND TECHNICAL SUPPORT TO ADVISORY AND TECHNICAL REVIEW COMMITTEES				
A. Public meeting logistics and mailings or other public notices	Each	10	\$1,000	\$10,000
B. Technical support - presentations of concepts and plan progress	Each	5	\$2,000	\$10,000
<i>Sub Total</i>				<i>\$20,000</i>
4. WATER USE PLAN				
A. Collect water use data and information Collect all information available at DES, then conduct site visits and interviews with each water user and write a report of their water use patterns, needs, and potential for reduction/sharing in times of scarcity	Registered water user: 15hours/ user @ \$50/ hr.	4	\$750	\$3,000
B. Mediate negotiations among water users Present instream flow requirements to users, and guide negotiations. Prepare and revise draft water use plans for each user based on progress of negotiations	Registered water user: 20hours/ user @ \$50/ hr.	4	\$1,000	\$4,000
C. Estimate costs for implementation of water use plan measures Estimate costs to implement water use plan by AWUs including an implementation schedule.	Registered water user: 20hours/ user @ \$50/	4	\$1,000	\$4,000
D. Prepare comprehensive water use plan document	Lump sum	1	\$20,000	\$20,000
<i>Sub Total</i>				<i>\$31,000</i>
5. IMPOUNDMENT MANAGEMENT PLAN				
A. Collect information dam characteristics and operation Collect all information available at DES, then conduct site visits and interviews with each impoundment owner and write a report of their operation patterns, needs, and potential for water management for release	Dam owner: 15hours/ owner @ \$50/ hr.	19	\$750	\$14,250
B. Mediate negotiations among dam owners and water users Present instream flow requirements to dam owners, and guide negotiations. Suggest interactive management options among dam owners and water users. Prepare and revise draft dam operation plans for each dam based on progress of negotiations	Dam owner: 40hours/ owner @ \$50/ hr.	19	\$2,000	\$38,000
C. Estimate costs for implementation of impoundment management measures Estimate costs to implement impoundment management plan including an implementation schedule.	Registered water user: 10hours/ user @ \$50/	19	\$500	\$9,500
D. Prepare comprehensive impoundment management plan document	Lump sum	1	\$20,000	\$20,000
<i>Sub Total</i>				<i>\$81,750</i>
TOTAL				\$234,750

"ESTIMATED COSTS TO PREPARE WATER MANAGEMENT PLANS FOR DESIGNATED RIVERS PILOT PROGRAM"

River Section Name	1. Establish Protected Instream Flows	2. Prepare a watershed-wide Conservation Plan	3. Logistical, Administrative and Technical Support to Protected Instream Flow Advisory Committee	4. Water Use Plan	5. Impoundment Management Plan	Total Amount
Souhegan	<i>\$137,000</i>	<i>\$63,000</i>	<i>\$20,000</i>	<i>\$53,000</i>	<i>\$75,250</i>	\$348,250
Lamprey	<i>\$71,000</i>	<i>\$31,000</i>	<i>\$20,000</i>	<i>\$31,000</i>	<i>\$81,750</i>	\$234,750
TOTAL	<i>\$208,000</i>	<i>\$94,000</i>	<i>\$40,000</i>	<i>\$84,000</i>	<i>\$157,000</i>	\$583,000